

Cushion Tire Forklift

Used Cushion Tire Forklift Georgia - Most forklifts are classified by the kind of work they do and some are classified by their type of tires. The two types of tire classification for forklifts are: 1. Cushion; and 2. Pneumatic. There are drawbacks and benefits to both pneumatic and cushion forklift tire options. The cushion tire benefits and drawbacks can only be understood in the context of what the pneumatic tire offers in terms of forklift operation.

Forklift Tire Classifications Cushion Tires

Cushion tires are made up of either smooth or treaded solid rubber and are designed around a metal ring or baseband. These kinds of forklift tires are cheaper to make and easier to maintain. This type of tire is made to work on smooth surfaces such as indoor concrete floors and loading docks. Cushion tires are also better suited to applications in tight spaces. This is because they offer a turning radius that allows for movement around tight corners. Cushion tires also allow the forklift to sit closer to the ground. The advantage of a lower forklift is the increased vertical clearance when compared to forklifts with pneumatic tires. However, cushion tires do not provide as much traction as pneumatic tires. This is especially true for outdoor areas and wet surfaces. Cushion tires forklifts are commonly used for organizing inventory, moving items to and from different loading docks, unloading shipments and similar applications.

Pneumatic Tires

Pneumatic tires are mainly utilized on uneven surfaces and rougher terrain. These tires fall into two categories: standard air pneumatic or solid resilient pneumatic. The main difference with these categories is that the standard air pneumatic tires consist of a layered rubber design filled with air and the solid resilient pneumatic type is made completely out of rubber. For locations with uneven surfaces and unpaved ground, pneumatic tire forklifts are prime choices. Solid resilient pneumatic forklifts are a better option in areas that may have objects which could puncture a standard air pneumatic, such as junkyards, lumber yards and the like which may have sharp metal objects.

Benefits of Cushion Tire Forklifts

Forklifts fitted with cushion tires are a good option for operation on smooth surfaces, both indoor and outdoor. The majority of forklifts that rely on cushion tires are used mostly indoors with limited outdoor use. They are often designed for use in areas such as manufacturing plants and warehouses. Warehousing and narrow aisles and tight locations all rely on the benefits of cushion tire forklifts. Some benefits of using a cushion tire forklift over a pneumatic tire forklift are:

- 1) **Maneuverability** Most cushion tire forklifts intended for indoor use are electric, which means they are usually smaller and more maneuverable because they do not require the extra room needed to accommodate the larger internal combustion engine.
- 2) **Lower Clearance** Indoor forklift models that use cushion tires feature lower clearance compared to pneumatic tire models. This enables the machine to travel through doors and navigate obstacles such as sprinkler systems and lights much easier.
- 3) **Durability** With little to no risk of a tire puncture, cushion forklift models are easy to maintain and ultra-durable.
- 4) **Quiet** Cushion tire forklifts do not use an internal combustion engine and instead rely on a battery or fuel cell, making them significantly quieter than their propane or diesel cousins.
- 5) **Environmentally Friendly** Powered by electricity instead of relying on an internal combustion engine enables cushion tire forklifts to make zero dangerous emissions.

Forklift Tire Choice

Most forklift frames only allow for either a cushion tire or a pneumatic tire. Tires and axles are specific to the lifting capacity and the machine's frame. Forklift manufacturers create models that safely operate with certain tires and wheels, typically pneumatic tires or cushion tires. Due to their special tire design, it is best to choose the forklift type that will suit the job in terms of forklift tire types.

Workplace Applications Suitable Work Applications for Cushion Tires

Cushion tire forklifts are popular for a variety of job sites. If most of the transporting, lifting loads and placement happens inside or with limited outdoor use on smooth surfaces, cushion tire forklifts are your best choice. Sitting closer to the ground, cushion tire forklifts have a tinier frame compared to pneumatic tire forklifts. This compact design facilitates easier clearance through doorways and overhead obstacle avoidance. It is important to note that cushion tire forklifts showcase less ground clearance and the machine may get caught up on exterior obstacles if the

ground is uneven. One solution to this problem is to fit the cushion tire forklift with traction tires on the front of their forklifts. Traction based tires will function in rough terrain environments that have wet surfaces, packed gravel and asphalt. These tires are not recommended for travelling on grass or dirt. Traction tires are utilized on the opposite sides, the steer and drive axles. One of the top advantages of the cushion forklifts is their tight turning radius. Cushion tire forklifts are excellent for manufacturing facilities and warehouse operations that are compact with less space. Locations that rely on narrow aisles will benefit greatly from the smaller cushion tire forklifts and their tight turning capabilities. Cushion tire forklifts are also less expensive and are more readily available than pneumatic tire forklifts. Suitable Work Applications for Pneumatic Tire Forklifts Outdoor applications working on gravel benefit from pneumatic tire forklift models thanks to the air in their tires. Pneumatic tires can also be used inside but do not provide the advantages of low clearance, maneuverability or small turning radius. Pneumatic tire models create harsh fumes with their internal combustion engines, making them unsuitable for interior locations. With a wider base and longer frame in comparison to cushion tire models, pneumatic tire forklifts are for use mainly outdoors. The solid pneumatic tire costs more compared to the air pneumatic tire. This is because a solid pneumatic tire is not susceptible to punctures or gouges because they are made of solid rubber and do not have air in them. Outdoor areas including lumber yards and scrap yards that feature copious amounts of metal debris and nails often rely on solid pneumatic tires. Similar to solid pneumatics, air pneumatics work well outdoors on asphalt, in gravel and in yards. Air-filled pneumatic tires can easily become punctured and their working environment needs to be evaluated carefully. It is essential to ensure the work site is free from any sharp materials before using a forklift with air pneumatic tires. Operator fatigue and discomfort can be traced to the bounciness of air-filled tires. It is possible to foam fill the pneumatic forklift tires for a smoother ride. The foam filling option creates a more even ride compared to the solid pneumatic tires or the bounciness of the air-filled pneumatic tires. Foam filling is commonly used for flat tire prevention. It is necessary to plan for enough time when foam filling an air pneumatic tire as it can take up to 3 days to fill and cure properly. Difference in Load Capacity The load capacity on for pneumatic tire forklifts and cushion tire forklifts are fairly equal. Some electric powered cushion tire forklifts do have lift limits. There are numerous forklifts available and a variety of pneumatic and cushion tire models can be found in a variety of load capacities. These machines come in different load capacities from under 2000 lbs. to over 200,000 lbs. depending on your application.